



## White River Mainstem Project

Office of Water Quality – Watershed Assessment and Planning Branch

(317) 308-3191 • (800) 451-6027

[www.idem.IN.gov](http://www.idem.IN.gov)

100 N. Senate Ave., Indianapolis, IN 46204

### **Background:**

The Indiana Department of Environmental Management (IDEM) will begin a fifth cycle of probabilistic monitoring in 2020 by sampling the mainstem White River and tributaries from the headwaters to the mouth encompassing three 8-Digit Hydrologic Units (05120201, 05120202, 05120203; the East Fork White River and tributaries will be sampled in 2022). The probabilistic monitoring program gets its name due to statistical probability, or randomness. IDEM collects and analyzes water samples from randomly selected streams within a given basin. Results from a small number of sampling sites provide IDEM with a snapshot of the overall physical, chemical, and biological quality of the waters within the basin at a given point in time. IDEM was approached by the Muncie Sanitary District's Bureau of Water Quality (BWQ) to collaborate on a project with the Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife to sample fish communities on the mainstem White River. To evaluate the White River mainstem as supporting or non-supporting for aquatic life use, approximately 65 targeted sites will be sampled for water chemistry, fish community, and habitat. In October 2019, IDEM received \$25,000 in funding from U.S. EPA to analyze water chemistry samples for nutrients. The U.S. EPA lab in Chicago will be analyzing water chemistry samples for general chemistry and dissolved metals, saving IDEM \$55,000 in laboratory costs. Site reconnaissance (working with landowners and others to determine the best route to access the site) started in November 2019. Sampling for this project will take place beginning in April 2020 and ending by October 2020. Results should be available by early 2021.

### **Objectives**

- Collect samples to give a "snapshot" of the water quality of the West Fork White River and White River.
- Assess stretches of the West Fork White River and White River that have not been sampled for many years.
- Collect additional data at historical DNR sites to continue monitoring and managing the fish community.
- Sample stream reaches on the [303\(d\) list](#) for possible removal of impairment(s).
- Identify shifts in fish community structure along the river.
- Identify how far up the West Fork White River invasive Silver Carp (*Hypophthalmichthys molitrix*) and Bighead Carp (*Hypophthalmichthys nobilis*) have reached.

### **Facts about the sampling area**

- The stretch of the West Fork White River and White River included in this project is 405 river miles long. The headwaters of the West Fork White River start in Randolph county and flow to the west through Muncie and Anderson, and then to the southwest through Noblesville and the Indianapolis metropolitan area. Once through Indianapolis, the West Fork White River runs for 214 river miles before joining with the East Fork White River. *Note: the East Fork White River and tributaries will be sampled in 2022 NOT 2020.*

- After the East and West Fork White River join together along the Daviess/Pike county line, the White River runs for 49.5 river miles until it reaches the Wabash River near Mount Carmel, IL.
- The West Fork White River has a drainage area of 5,367.5 mi<sup>2</sup>. This drainage area consists of 24.2 percent forest, 17.6 percent of the area is developed land, 1.6 percent wetland.
- The entire White River has a drainage area of 11,340.9 mi<sup>2</sup>. This drainage area consists of 30 percent forest, 12.9 percent of the area is developed land, 1.8 percent wetland.

**IDEM's Role:**

- The Indiana Department of Environmental Management is responsible for protecting human health and the environment in accordance with federal and state regulations, while providing for safe industrial, agricultural, commercial, and governmental operations vital to a prosperous economy.
- If you have any questions about this project, please contact Stacey Sobat with IDEM's Watershed Assessment and Planning Branch at (800) 451-6027 (press 5) or (317) 308-3191, or [ssobat@idem.IN.gov](mailto:ssobat@idem.IN.gov). For more information about this and other IDEM Office of Water Quality assessment programs and areas of study in Indiana, visit the Watershed Assessment and Planning Branch website at [www.idem.IN.gov/cleanwater/2338.htm](http://www.idem.IN.gov/cleanwater/2338.htm).